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FIG. 1

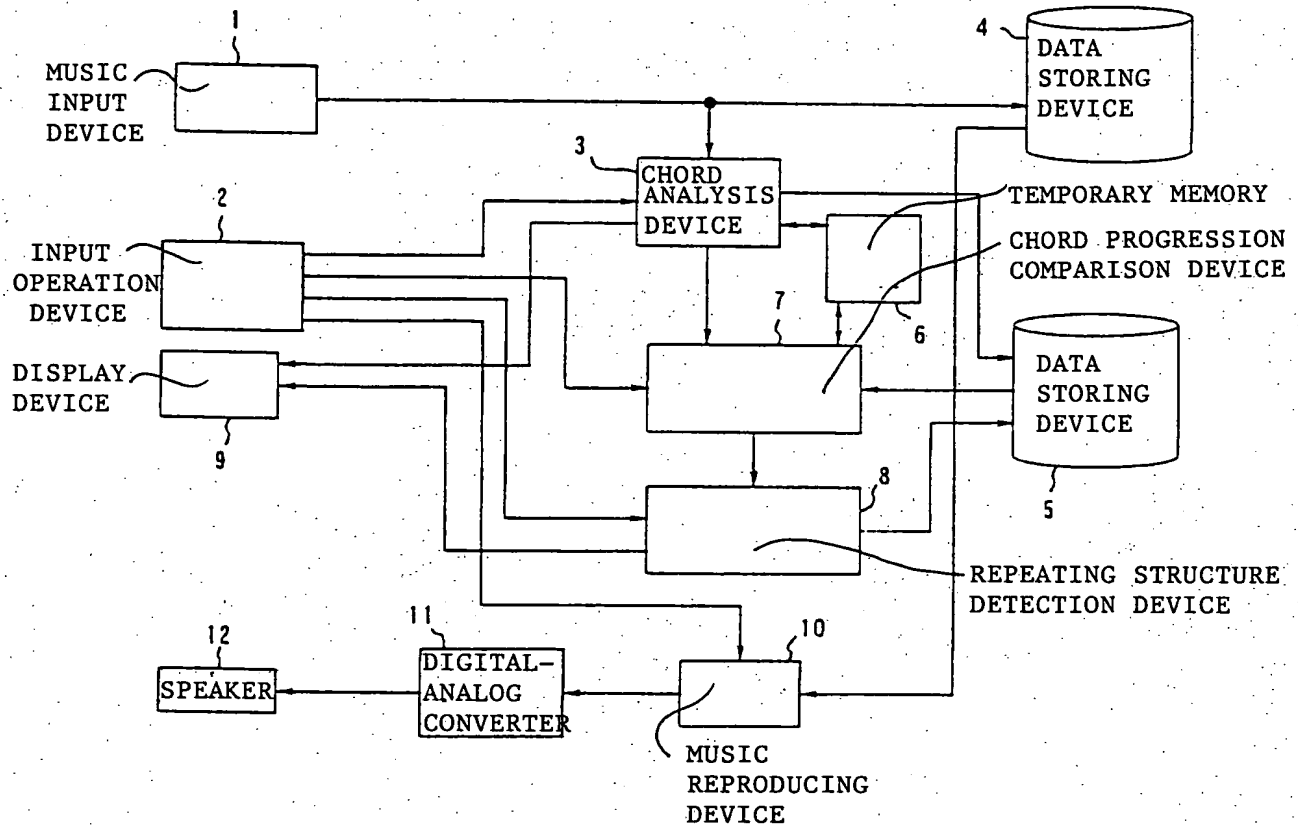


FIG. 2

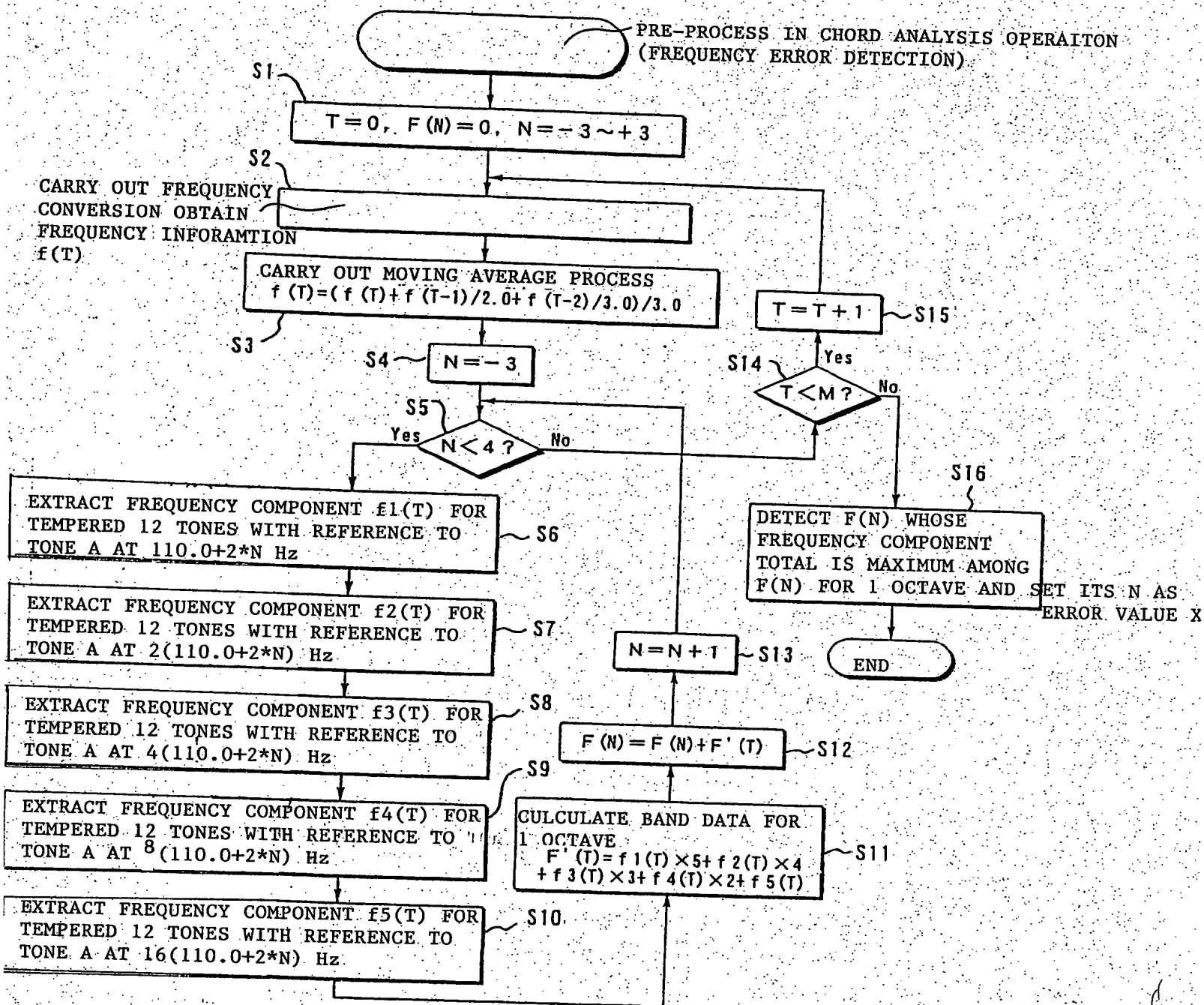


FIG. 3

A	1.0
A #	AX1.059163
B	AX1.124622
C	AX1.189207
C #	AX1.259921
D	AX1.334840
D #	AX1.414214
E	AX1.498307
F	AX1.587401
F #	AX1.681793
G	AX1.781797
G #	AX1.887749
A	AX2.0

FIG. 4

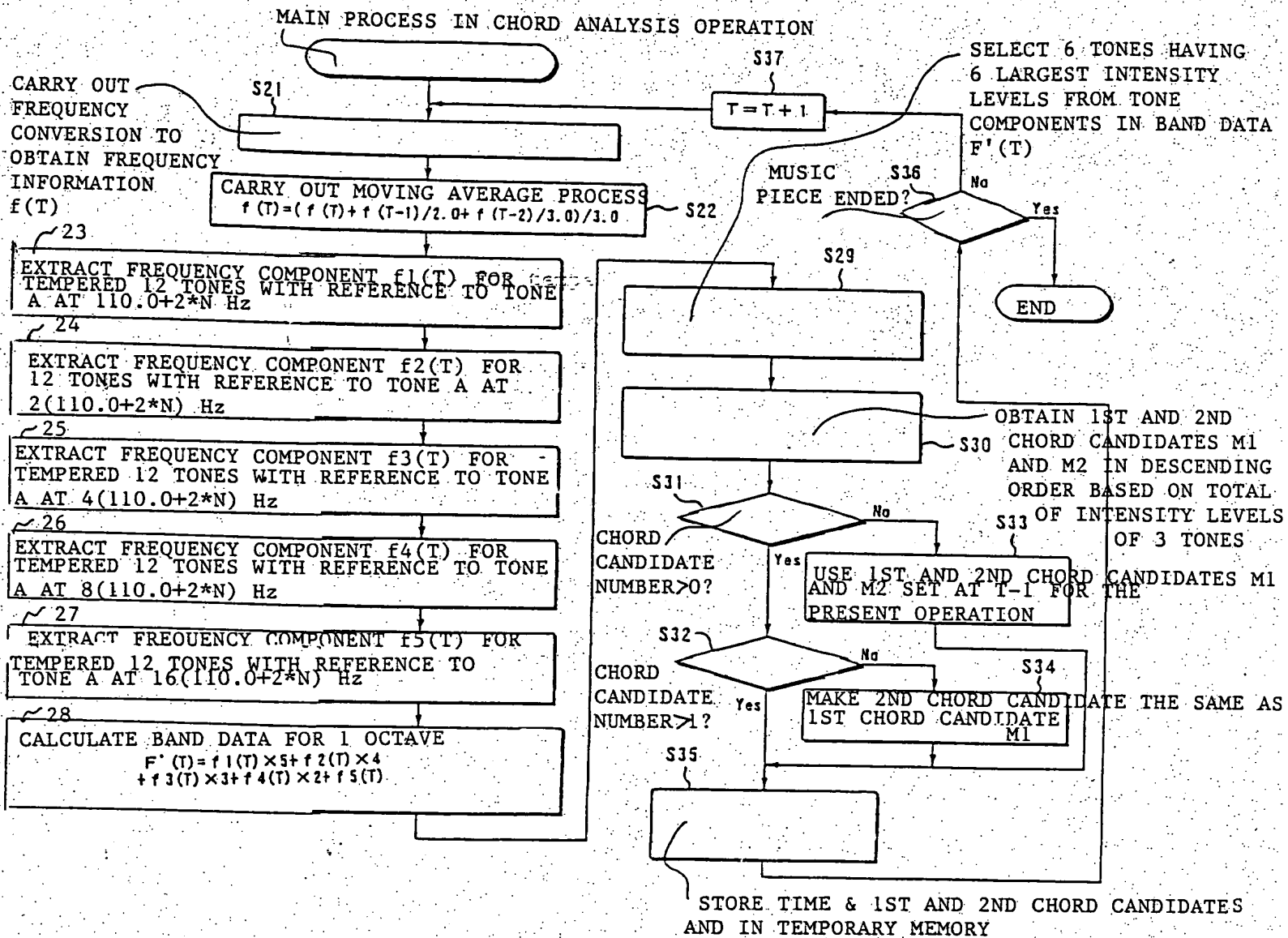


FIG. 5

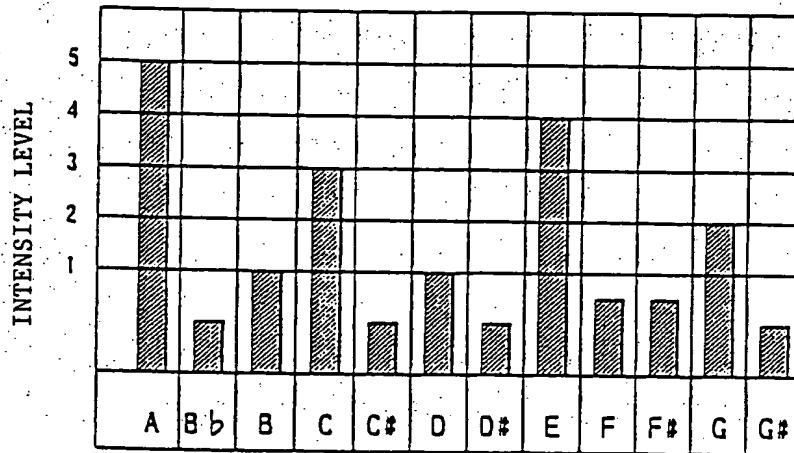


FIG. 6

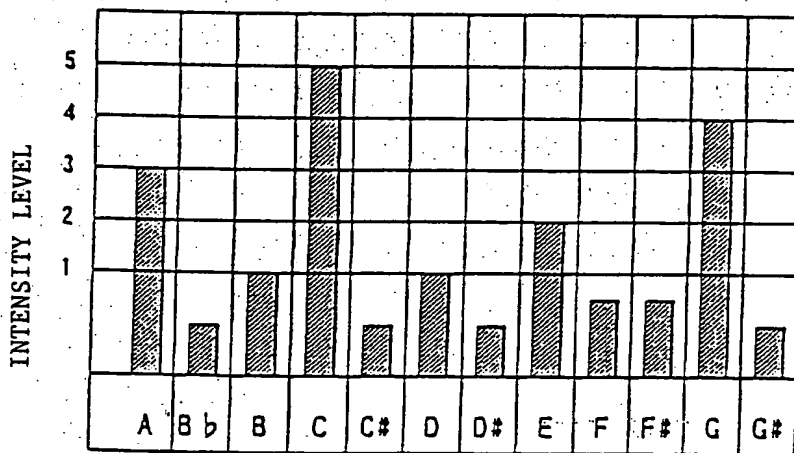


FIG. 7

$A+C+E+G(Am7)$
 $\rightarrow A+C+E(Am) \mid C+E+G(C)$
 $A+C+E \mid +F\#(Adim7)$
 $\rightarrow A+C+E \mid (Adim7^{CANDIDATE}) \mid C+E \mid +F\#(Cdim7^{CANDIDATE})$
 $A+C\#+E+G(A7)$
 $\rightarrow A+C\#+E(A) \mid A+C\#+G(A7^{CANDIDATE}) \mid C\#+E+G(C\#dim7^{CANDIDATE})$
 $A+C+E+G+B(Am7.9)$
 $\rightarrow A+C+E(Am) \mid C+E+G(C) \mid E+G+B(Em)$

FIG. 8

TIME (4 BYTES) 1ST CHORD CANDIDATE (1 BYTE) 2ND CHORD CANDIDATE (1 BYTE)
 TIME (4 BYTES) 1ST CHORD CANDIDATE (1 BYTE) 2ND CHORD CANDIDATE (1 BYTE)

TIME (4 BYTE) 1ST CHORD CANDIDATE (1 BYTE) 2ND CHORD CANDIDATE (1 BYTE)

FIG. 9A

FUNDAMENTAL TONE	
A	0 x 0 0
A #	0 x 0 1
B	0 x 0 2
C	0 x 0 3
C #	0 x 0 4
D	0 x 0 5
D #	0 x 0 6
E	0 x 0 7
F	0 x 0 8
F #	0 x 0 9
G	0 x 0 A
G #	0 x 0 B

FIG. 9B

ATTRIBUTE	
MAJOR	0 x 0 0
MINOR	0 x 0 2
7TH CANDIDATE	0 x 0 1
DIM 7TH CANDIDATE	0 x 0 3

FIG. 9C

ATTRIBUTE (LOWER 4 BITS) +
 FUNDAMENTAL TONE (LOWER 4 BITS)

FIG. 10

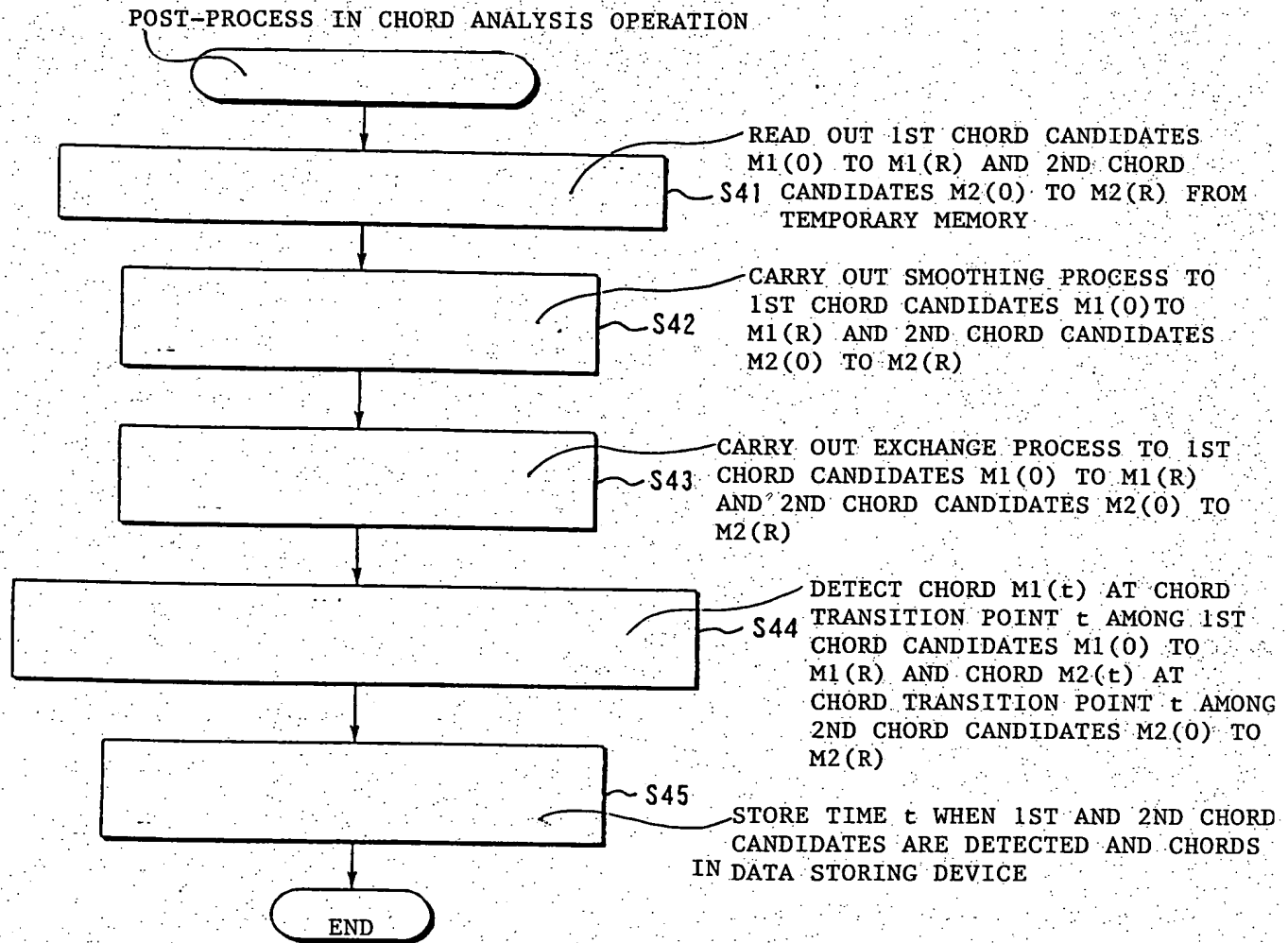


FIG. 11

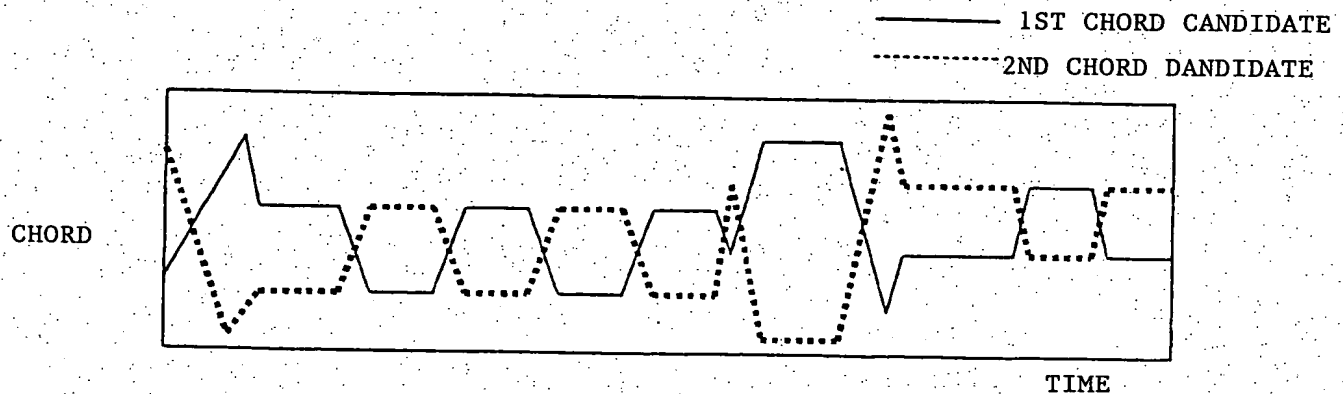


FIG. 12

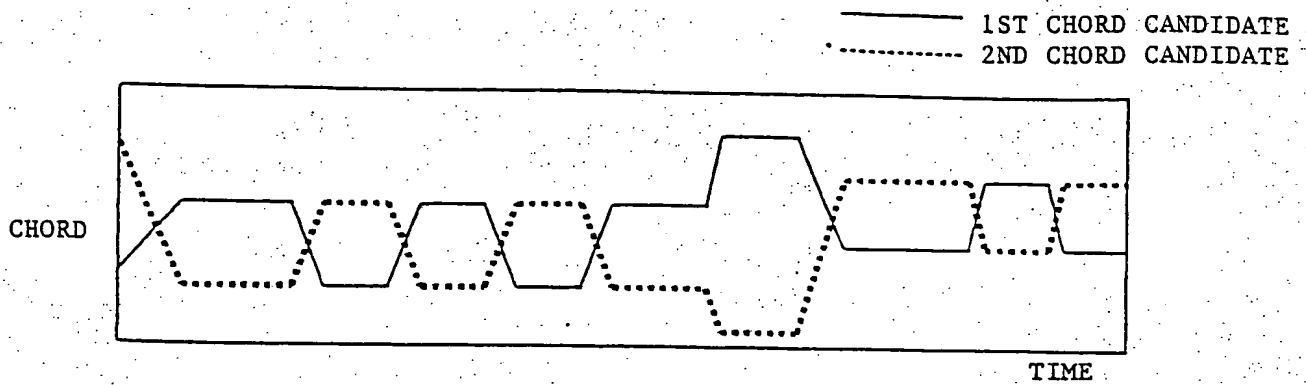
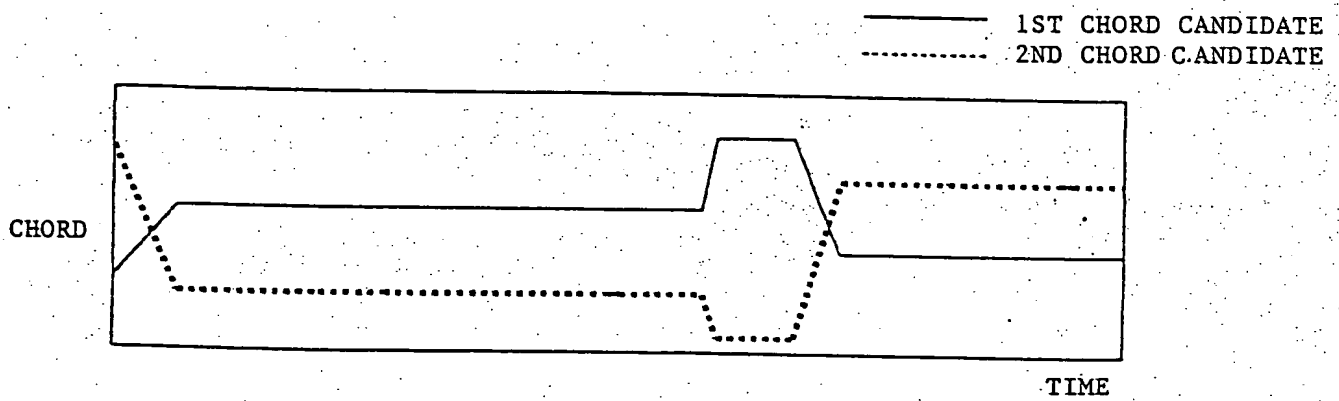


FIG. 13



— 1ST CHORD CANDIDATE
..... 2ND CHORD CANDIDATE

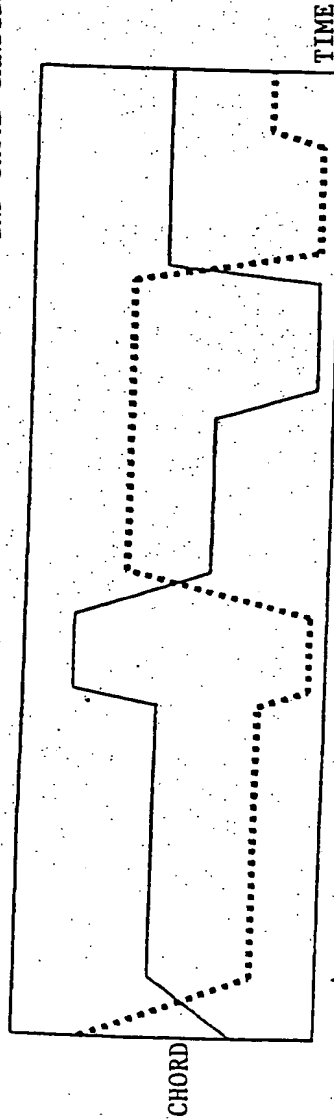


FIG. 14A

FIG. 14B

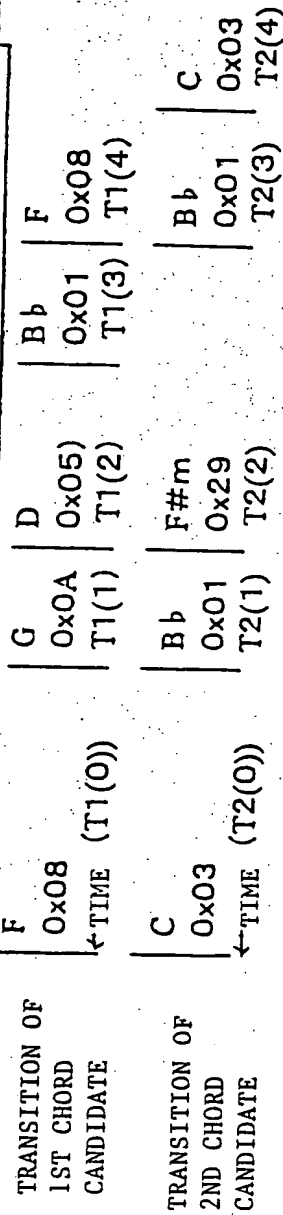


FIG. 14C

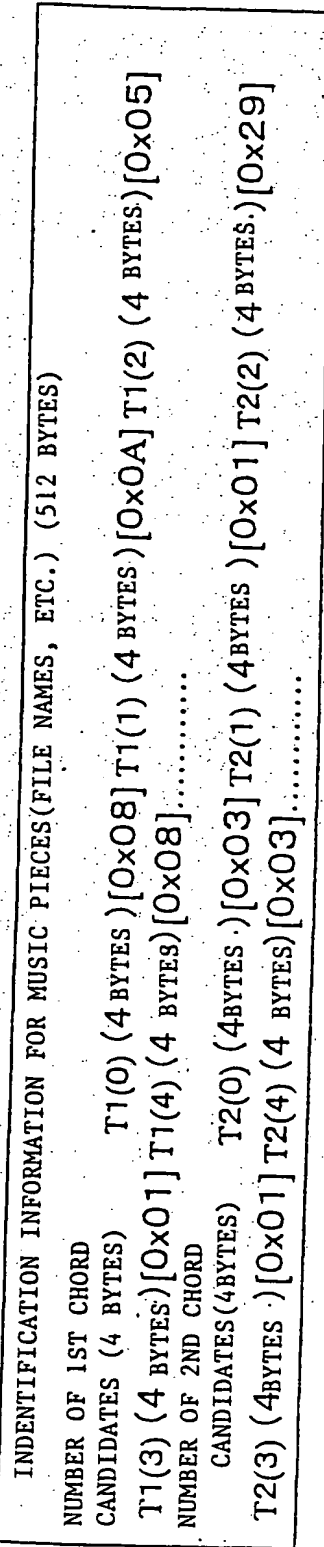


FIG. 14D

FIG. 15

MUSIC STRUCTURE DETECTION OPERATION

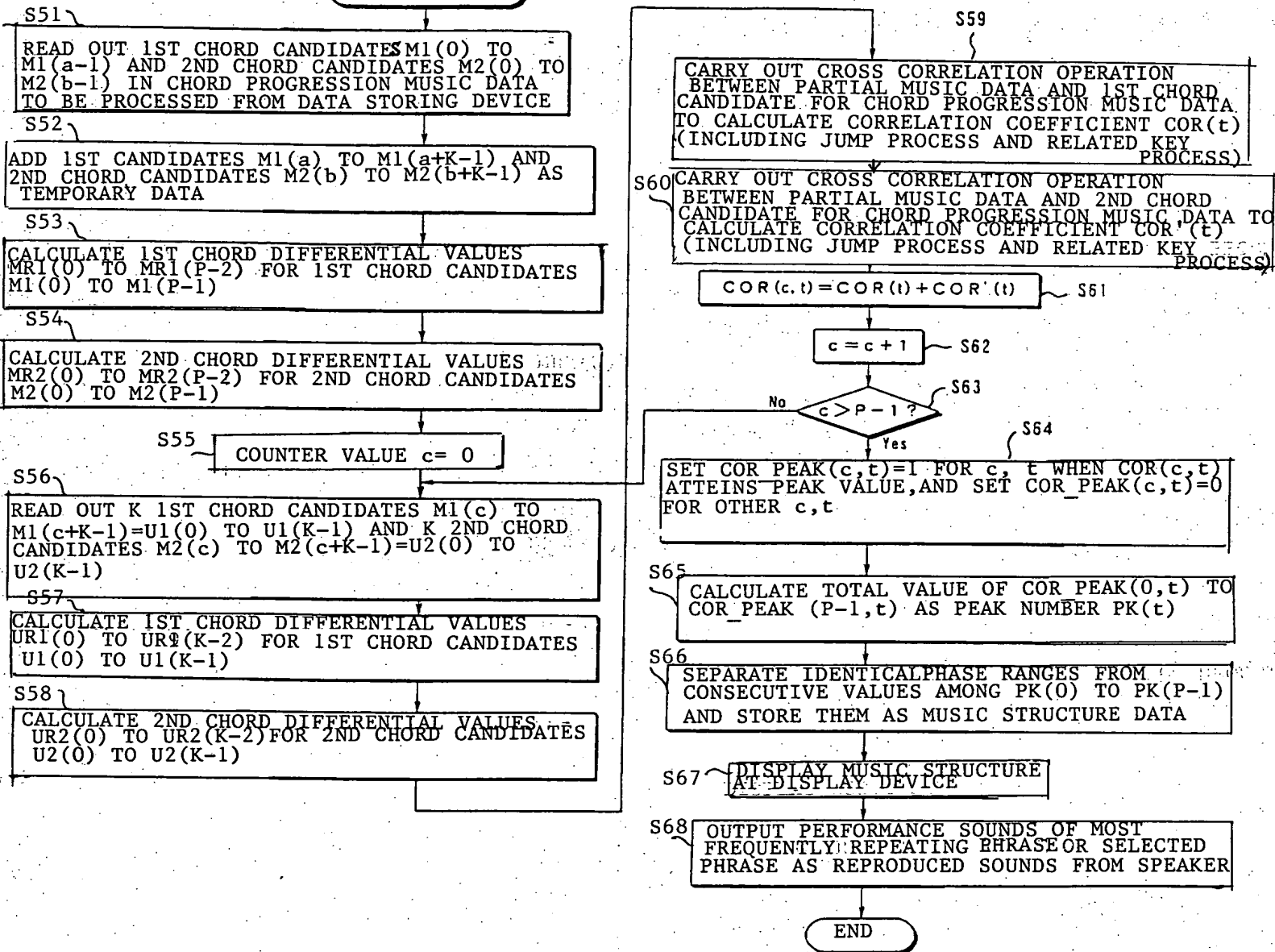


FIG. 16

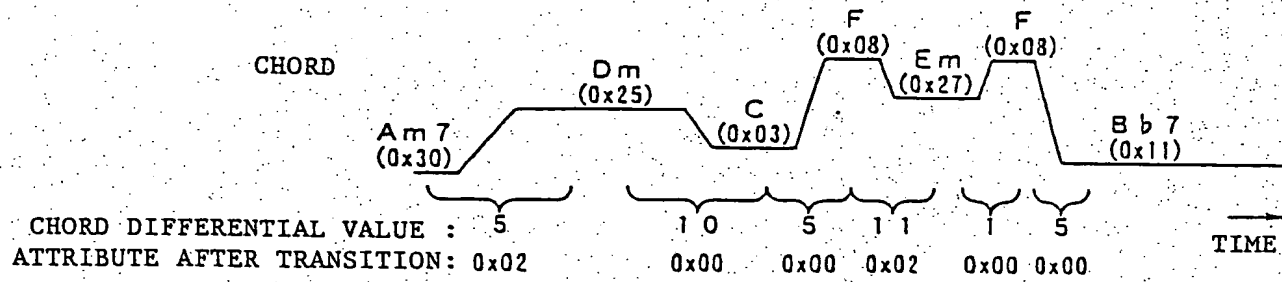


FIG. 17

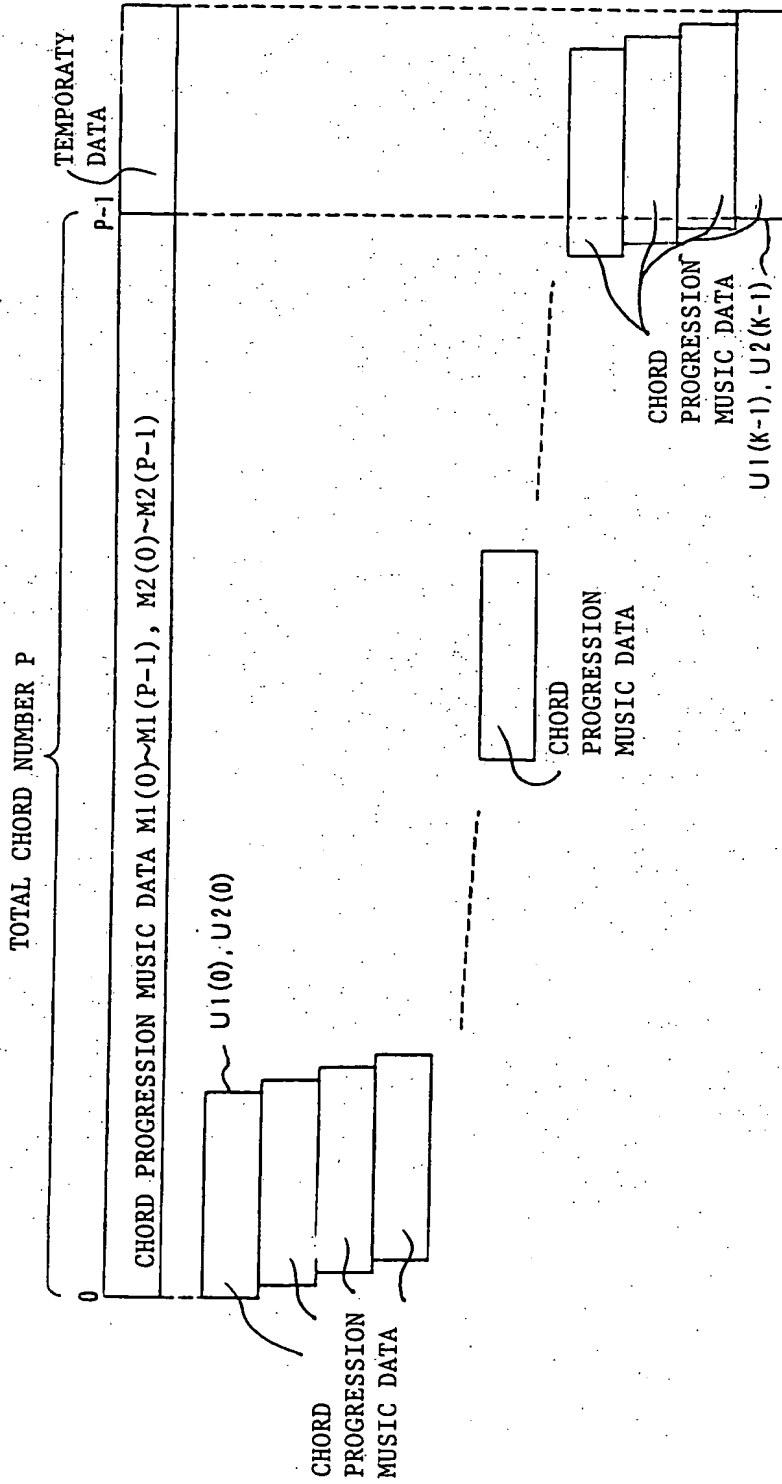


FIG. 18A

FIG. 18B

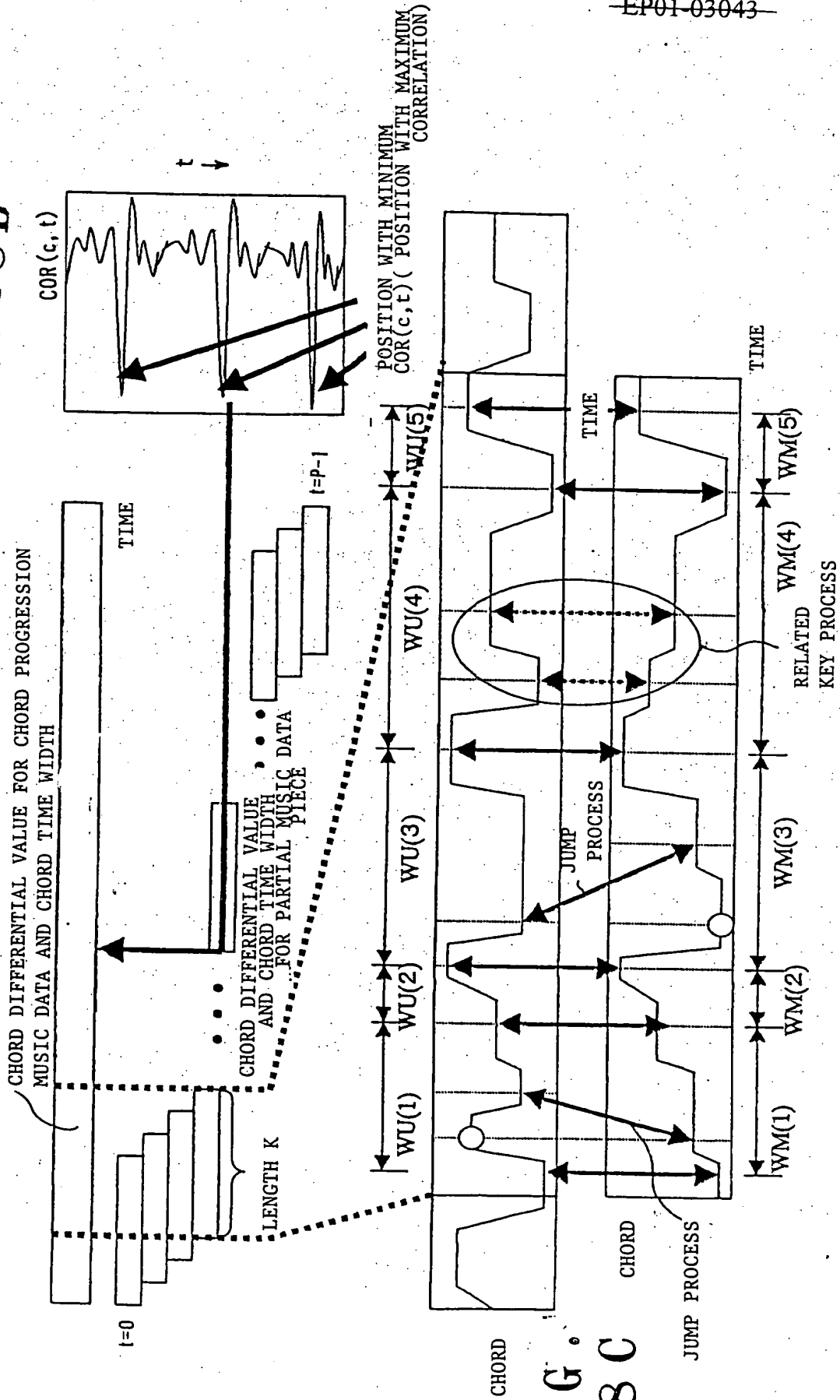


FIG. 18C

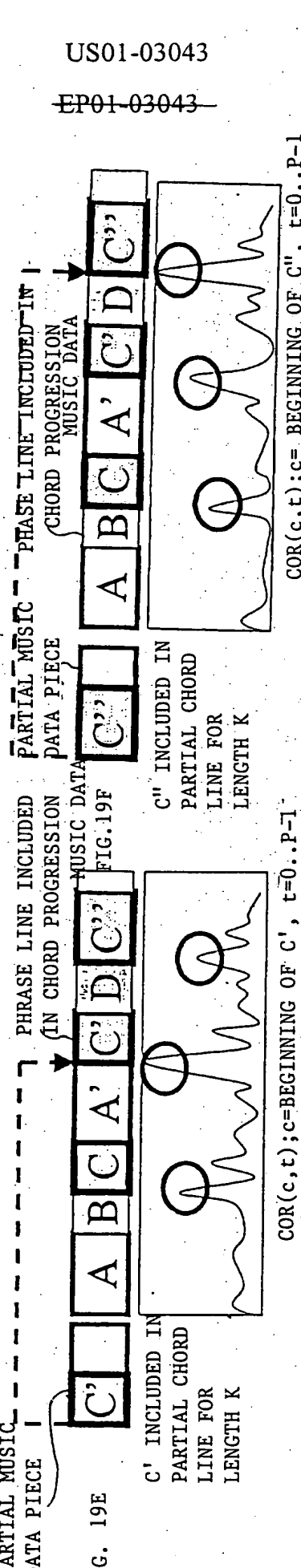
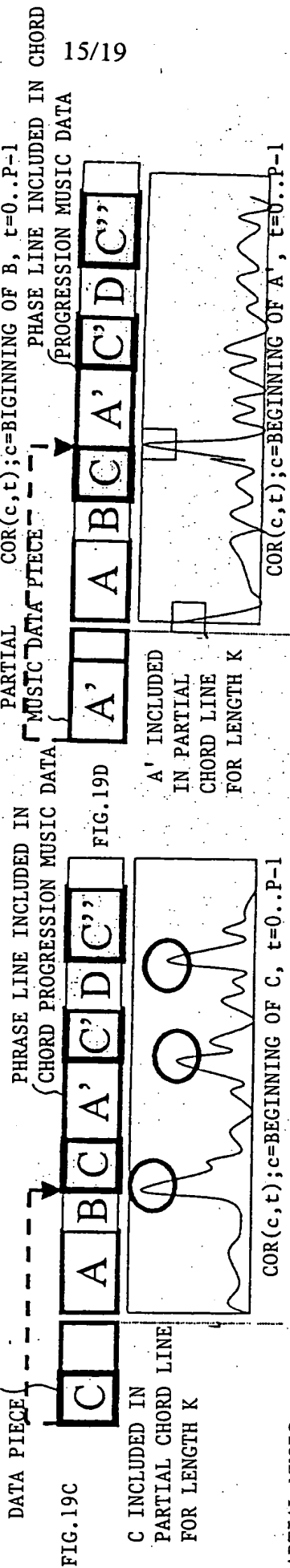
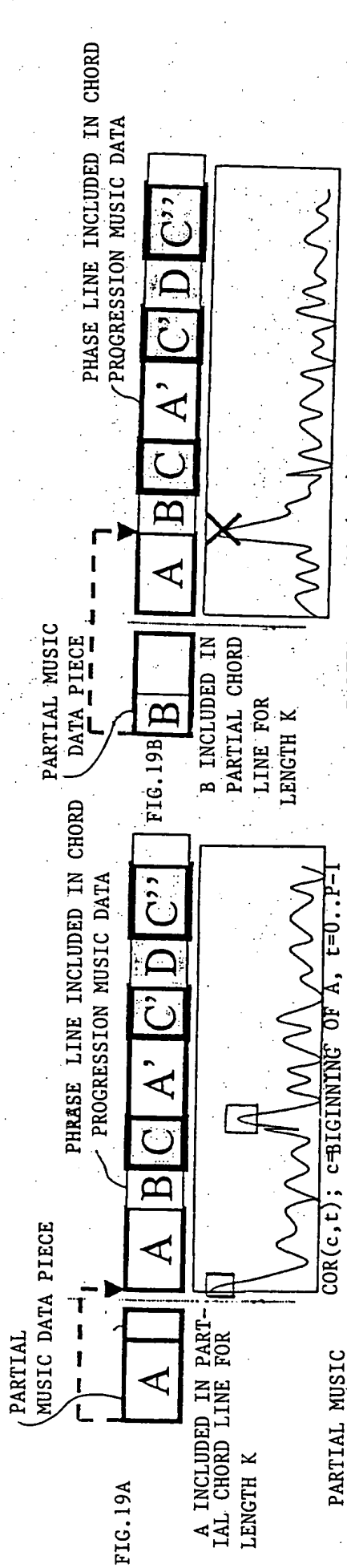
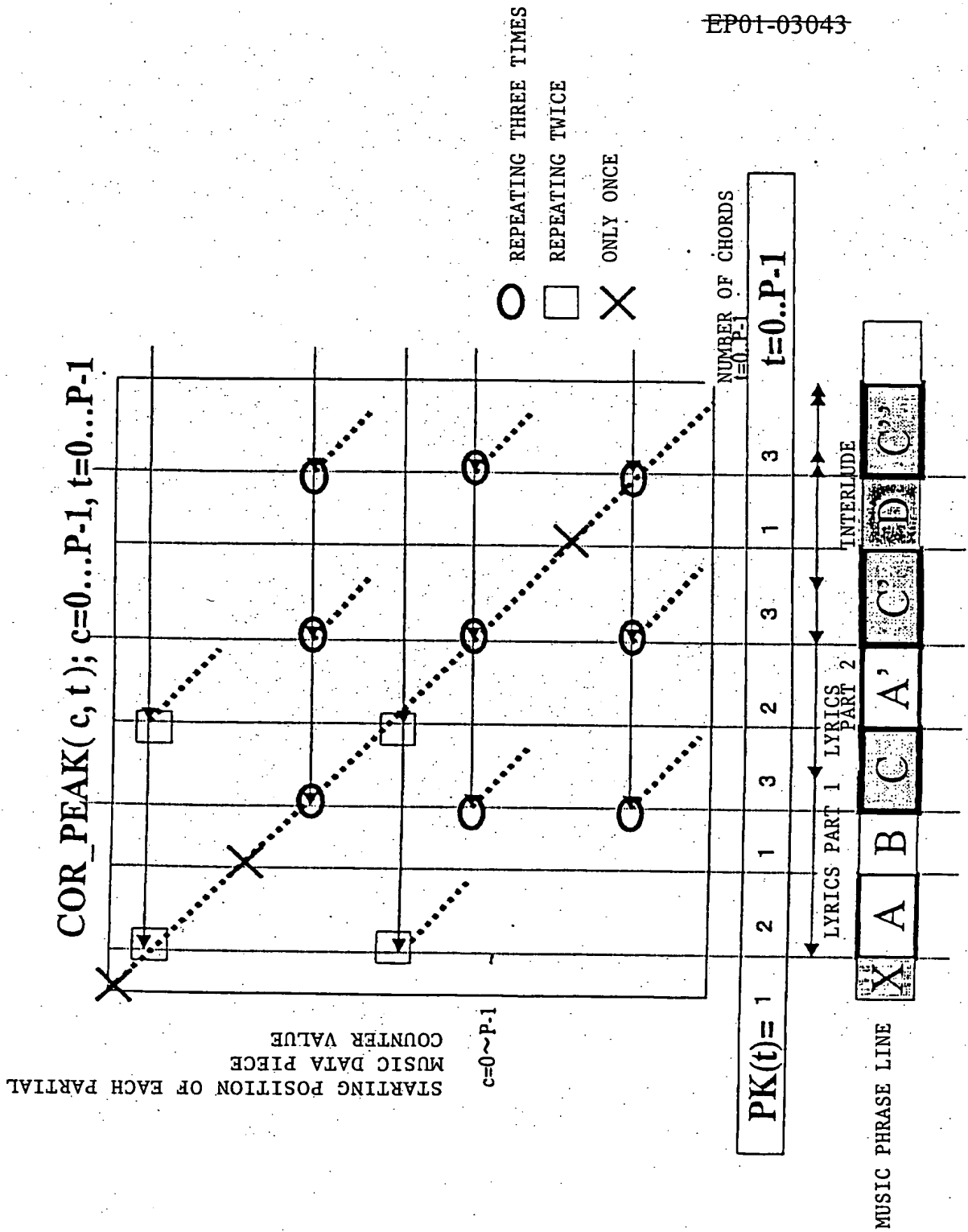


FIG. 20



IDENTIFICATION INFORMATION FOR MUSIC PIECES(FILE NAMES, ETC.)(512 BYTES)

REPEATING PART 1: PHRASE REPEATING THREE TIMES

0×03(RANK 3, 1 BYTE) 1ST PHRASE STARTING TIME INFORMATION (4 BYTES)
1ST PHRASE ENDING TIME INFORMATION (4 BYTES)
2ND PHRASE STARTING TIME INFORMATION (4 BYTES)
2ND PHRASE ENDING TIME INFORMATION(4 BYTES)
3RD PHRASE STARTING TIME INFORMATION (4 BYTES)
3RD PHRASE STARTING TIME INFORMATION (4 BYTES)

REPEATING PART 2: PHRASE REPEATING TWICE

0×02 (RANK 2,1 BYTE) 1ST PHRASE STARTING TIME INFORMATION (4 BYTES)
1ST PHRASE ENDING TIME INFORMATION (4 BYTES)
2ND PHRASE STARTING TIME INFORMATION (4 BYTES)
2ND PHRASE ENDING TIME INFORMATION (4 BYTES)

REPEATING PART 3: PHRASE REPEATING TWICE

0×02(RANK 2,1 BYTE) 1ST PHRASE STARTING TIME INFORMATON (4 BYTES)
1ST PHRASE ENDING TIME INFORMATION (4 BYTES)
2ND PHRASE STARTING TIME INFORMATION (4 BYTES)
2ND PHRASE ENDING TIME INFORMATON (4 BYTES)

REPEATING PART 4:(ACTUALLY NOT REPEATING, APPEARING ONLY ONCE)

0×01(RANK 2,1 BYTE)PHRASE STARTING TIME INFORMATION(4 BYTES)
PHRASE ENDING TIME INFORMATION (4 BYTES)
0×01(RANK 2,1 BYTE)PHRASE STARTING TIME INFORMATION (4 BYTES)
PHRASE ENDING TIME INFORMATION (4BYTES)
0×01(RANK 2,1 BYTE) PHRASE STARTING TIME INFORMATION(4 BYTES)
PHRASE ENDING TIME INFORMATION (4 BYTES)

FIG. 21

FIG. 22

MUSIC TITLE OR FILE NAME		
<div>IMPRESSIVE PART RANKING 2</div> <div><input type="radio"/> 1ST PART!</div> <div><input type="radio"/> 2ND PART!</div>	<div>IMPRESSIVE PART RANKING 1</div> <div><input type="radio"/> 1ST PART!</div> <div><input type="radio"/> 2ND PART!</div> <div><input type="radio"/> 3RD PART!</div>	<div>IMPRESSIVE PART RANKING 2</div> <div><input type="radio"/> 1ST PART!</div> <div><input type="radio"/> 2ND PART!</div>
<div><input type="radio"/> INTRO?</div> <div>REPRODUCE FROM START!</div>		<div>MELODY B? <input type="radio"/></div> <div>STOP!</div>

FIG. 23

